Hard-Copy Field Information Recording Forms

Appendix H

Revision 03, March 2003

Master Data Fields List

| Survey Information | Survey IDChief Survey ScientistSurvey NameVesselStart Date | Start TimeStop DateStop TimeSurvey Description | | |
|--|--|---|--|--|
| Station Information | Visit ID Station ID Pilot ID Arrival Date Arrival Time Departure Date Departure Time Latitude (D,M) Station Depth | Water Temperature(°C) Air Temperature (°C) Wind Direction Wind Speed Wave Height Barometric Pressure Station ID Visibility Weather Remarks | | |
| Rosette Sampling Data | Survey ID Visit ID Sample Date Sample Time EBT Operator Assistant Sampler Method ID Instrument ID Station ID | Total Depth Surface Water Temperature Sample ID Depth Code QCID Code Depth Temperature Remarks | | |
| Ponar Grab Sampling Data | Survey ID Visit ID Station ID Sample Date Sample Time Personnel | Water Depth Sample ID Sample QCID Code Number of Bottles Remarks | | |
| Zooplankton Net Flowmeter Calibration | Survey ID Station ID Date Time Flowmeter ID Mesh Size | Winch Operator Meter Reader Depth Revolutions Line Angle Comments | | |
| Zooplankton Sampling & Secchi Disk Data | Survey ID Visit ID Station ID Sample Date Personnel Sample ID Sample Time Depth Code QCID Code Mesh Size | Sample Depth Flowmeter Reading Flowmeter ID Net Angle Remarks Reader Secchi Depth Sample Time Reader Reader Reader Reader Remarks | | |

Master Data Fields List

| Chlorophyll a Preparation | Survey ID Visit ID Station ID Preparation Batch ID Sample ID Depth Code | Check Mark Remarks Sample Volume Preparation Date Preparation Finish Time Personnel |
|--|---|---|
| Phytoplankton Preservation | Survey ID Visit ID Station ID Preparation Batch ID Sample ID Depth Code | Check Mark Remarks Sample Volume Preparation Date Preparation Finish Time Personnel |
| Nutrients Preparation | Survey ID Visit ID Station ID Preparation Batch ID Preparation Date Preparation Finish Time | PersonnelSample IDDepth CodeCheck MarkRemarks |
| POC, PN, PP Preparation | Survey ID Visit ID Station ID Batch ID Date Time Personnel | Sample ID Depth Code Volume - POC Volume - PN Volume - PP Remarks |
| TSS Preparation | Survey ID Visit ID Station ID Filtration Batch ID Filtration Date Filtration Time | Personnel Sample ID Preparation Batch ID Filter Number Volume Sample Filtered Remarks |
| Preparation of Quality Assurance Samples | Survey ID Visit ID Station ID Method SOP Sample ID QCID Code Preparation Date | Preparation Time Analyst Analyte Code Target Value Target Units Remarks/Source Materials |

Master Data Fields List

| Calibration Data of Board Chemistry Instruments Plus Shiftwise Standardization | Survey ID Lake pH Meter Buffer 4 Buffer 7 Buffer 10 Turbidity Meter at zero - Before Adjusting Turbidity Meter at 20 - Before Adjusting Turbidity Meter at zero - After Adjusting Turbidity Meter at 20 - After Adjusting Turbidity Meter at 20 - After Adjusting Date of Calibration Time of Calibration Time of Calibration Analyst Conductivity Standards - 106.1 umho/cm Conductivity Standards - 210.3 umho/cm Conductivity Standards - 313.5 umho/cm | Conductivity Standards - 415.8 umho/cm Turbidity Standards - 2ero Turbidity Standards - 0.4 Turbidity Standards - 2.0 Turbidity Standards - 8.0 Turbidity Standards - 20 Station ID Date/Time Analyst pH Determination Buffer 7 Temperature of Standardization Alkalinity Determination buffer 4 Temperature of Standardization Turbidity 20 NTU Turbidity Empty Compartment | | |
|--|---|--|--|--|
| Control Standards Data of Board Chemistry Parameters | Survey ID Visit ID Station ID Lake Sample ID | Measured ValueRemarksDate of Control CheckTime of Control CheckAnalyst | | |
| Board Chemistry Data | Survey ID Visit ID Station ID Analytical Batch ID Analytical Date Analytical Time Analyst | Sample ID Depth Code pH Specific Conductance Total Alkalinity Turbidity Remarks | | |
| Dissolved Oxygen Data (Winkler) | Survey ID Visit ID Station ID Analytical Batch ID Analytical Date Analytical Time Analyst Sample ID | Titrant Used DO BOD Bottle Volume Volume Corrected DO Temperature (°C) Barometric Pressure Corrected Table Value Remarks | | |

| Survey ID | | Survey Info | ormation | | | |
|-----------------------------------|-------------|-------------|----------------------------|------------------------------------|---------------------------|-----------------------------------|
| | | | | | | |
| Chief Survey Scientist (initials) | Survey Name | Vessel | Start Date (mm/dd/yyyy) | Start Time (Shiptime, military) | Stop Date (mm/dd/yyyy) | Stop Time (Shiptime, military) |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Survey Description | | | | | | |
| | | | | | | |
| | | | | | | |

Station Information

| Visit ID | Station ID | Pilot ID | Arrival Date | Arriva | l Time | Departure Date | Departure Time | Lat | itude | Long | jitude | Station Depth | Water Temp. | Air Temp | Wind Direction | Wind Speed | Wave Height | Barometric Pressure |
|----------|------------|------------|--------------|----------------------------------|----------------------|----------------|----------------------------------|-----------|-----------|-----------|-----------|------------------|----------------|----------|-------------------|----------------|----------------|------------------------|
| | | (initials) | (mm/dd/yyyy) | (Shiptime, military) hh:mm | (Zone difference) | (mm/dd/yyyy) | (Shiptime, military) hh:mm | (Degrees) | (Min.xxx) | (Degrees) | (Min.xxx) | (meters) | (°C) | (°C) | (deg T) | (naut mile) | (meters) | (in Hg) |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |
| | | | | | | | : | | | | | | | | | | | |
| | | | | : | | | | | | | | | | | | | | |
| | | | | : | | | : | | | | | | | | | | | |

Station Information

| Station ID | Visibility | | | Weather | | | Remarks |
|------------|------------|-------|----------|---------------------------------|-----|---------------|---------|
| | (miles) | | | (Circle One) | | | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| - | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |
| | | CLEAR | OVERCAST | RAIN SNOW HAZY MOSTLY CLOUDY | FOG | PARTLY CLOUDY | |

Rosette Sampling Data

| Survey ID | Visit ID | Sample Date (mm/dd/yyyy) | Sample Time (Shiptime, military) | EBT Operator (Initials)XXX | Asst Sampler (Initials)XXX |
|-----------|----------|--------------------------|----------------------------------|----------------------------|-------------------------------|
| | | | | | |

| Method ID | Instrument ID | Station ID | Total Depth (from Rosette) | Surface Water Temperature (°C) |
|-----------|---------------|------------|----------------------------|-----------------------------------|
| | | | | |

| Sample ID | Depth Code | QCID Code | Depth (meters) | Temperature (°C) | Remarks |
|-----------|---------------|--------------|-----------------------|------------------|---------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

The Integrated sample was created from the following samples (also list depths):_____

Notes: Refer to LG200 for depth code abbreviations and definitions.

Ponar Grab Sampling Data

| Survey ID | Visit ID | Station ID | Sample Date (mm/dd/yyyy) | Sample Time (Shiptime, military) | Personnel (initials) xxx | Water Depth (meters) |
|-----------|----------|------------|-----------------------------|----------------------------------|-----------------------------|-------------------------|
| | | | | | | |

| Sample ID | Sample (sediment/benthos) | QCID Code | Number of Bottles | Remarks |
|-----------|------------------------------|--------------|-------------------|---------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Survey ID | Visit ID | Station ID | Sample Date (mm/dd/yyyy) | Sample Time (Shiptime, military) | Personnel (initials) xxx | Water Depth (meters) |
|-----------|----------|------------|-----------------------------|-------------------------------------|--------------------------|-------------------------|
| | | | | | | |

| Sample ID | Sample (sediment/benthos) | QCID Code | Number of Bottles | Remarks |
|-----------|---------------------------|--------------|-------------------|---------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

NOTE: Refer to Attachment A of the WQS QAPP, LG400, or LG401 for more information on integrated samples.

Method (SOP Code): LG 406

03/01/02

Entered into electronic file_____ (initials)

Zooplankton Net Flowmeter Calibration

| Survey ID | Station ID | Date (mm/dd/yyyy) | Time (Shiptime, military) | | | | |
|---------------|------------|--------------------------|---------------------------|---------------|-----------|-------------------|----------------|
| | | | | | | | |
| Flowmeter | Mesh Size | Winch Operator | Meter Reader | Flowmeter | Mesh Size | Winch Operator | Meter Reader |
| ID (number) | (um) | (initials) XXX | (initials) XXX | ID (number) | (um) | (initials) XXX | (initials) XXX |
| | 153 um | | | | 63 um | | |
| Tow number | Depth | Revolutions | Line Angle | Tow number | Depth | Revolutions | Line Angle |
| 1 | | | | 1 | | | |
| 2 | | | | 2 | | | |
| 3 | | | | 3 | | | |
| 4 | | | | 4 | | | |
| 5 | | | | 5 | | | |
| 6 | | | | 6 | | | |
| 7 | | | | 7 | | | |
| 8 | | | | 8 | | | |
| 9 | | | | 9 | | | |
| 10 | | | | 10 | | | |
| 11 | | | | 11 | | | |
| 12 | | | | 12 | | | |
| 13 | | | | 13 | | | |
| 14 | | | | 14 | | | |
| 15 | | | | 15 | | | |
| 16 | | | | 16 | | | |
| 17 | | | | 17 | | | |
| 18 | | | | 18 | | | |
| 19 | | | | 19 | | | |
| 20 | | | | 20 | | | |
| | | | | | | <u></u> | |
| Comments: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

NOTE: Refer to Attachment A of the WQS QAPP, LG400, or LG401 for more information on integrated samples.

Zooplankton Sampling and Secchi Disk Data

| Survey ID | Visit ID | Station ID | Sample Date (mm/dd/yyyy) | Personnel (Initials) XXX |
|-----------|----------|------------|-----------------------------|-----------------------------|
| | | | | |

| Sample ID | Sample Time (Shiptime, military) | Depth Code | QCID Code | Mesh Size (μm) | Sample Depth (meters) | Flowmeter Reading | Flowmeter ID (number) | Remarks |
|-----------|-------------------------------------|---------------|--------------|-----------------------|-----------------------|----------------------|-----------------------|---------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Secchi Depth (meters) | Sample Time (Shiptime, military) | Reader (Initials) XXX | Remarks |
|--------------------------|-------------------------------------|--------------------------|---------|
| | | | |
| | | | |

Notes:

- 1. Refer to LG200 for depth code abbreviations and definitions.
- 2. Refer to Attachment A of the WQS QAPP, LG400, or LG401 for more information on integrated samples.
- 3. Field duplicates are taken for Secchi disk measurements each time a field duplicate is scheduled for collection for the Surface sample of a lake (the sample collected at 1 meter below the surface). Two different analysts should take the duplicate measurements and the acceptance criteria for these duplicates is less than or equal to 0.5 meters.